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> April 5, 2016 VIA PRIORITY MAIL RETURN RECEIPT REQUESTED

Mr. Jeremy Carroll OEPA-DHWM-CO P.O. Box 1049 Columbus, Ohio 43216-1049

Re: Permit Modification Class Determination Request Compressed Gas 13 Heritage Thermal Service - OHD 980 613 541/02-15-0589

Dear Mr. Carroll:

Please consider this letter a request for a classification determination pursuant to OAC 3745-50-51 (E)(1)(b).

In accordance with section C-2e(5) of Heritage Thermal Services' Waste Characteristics and Waste Analysis Plan (WAP), HTS may add a new compressed gas to the permit under the Class 1 with prior Director Approval (1A) modification process provided the new compressed gas does not poses a hazard that was not identified in the 2002 accident analysis. The hazards/risks identified in the 2002 accident analysis were asphyxiation and toxicity. These hazards/risks were addressed through the inclusion of several permit conditions and restrictions. When evaluating a new compressed gas for addition to the permit, HTS must consider the following criteria; (1) hazardous versus non-hazardous; (2) vapor pressure; (3) vapor density; (4) exposure guidelines; (5) solubility in water; (6) composition; and (7) flammability.

HTS has been approached by customers seeking incineration of compressed gas waste stream mixtures that may have trace contamination of a flammable gas. After researching these mixtures, HTS believes that these waste streams meet the acceptability criteria of the WAP and can be added to permit through the procedure described in C-2e(5).

By themselves, these trace gases would be classified as a flammable gas and prohibited under the current permit. However when added to a mixture at concentrations below the lower flammability limit (LFL), the trace gases are not classified as flammable gases by the Department of Transportation (DOT) since the mixture is not flammable. As such, these gases, in trace concentrations, would not be prohibited by the permit and can be added to the permit thru a Class 1A permit modification provided the following criteria are met:



OHSAS 18001: 2007

ISO 14001: 2004

ISO 9001: 2008



- 1) The flammable gas component mixture is below the LFL concentration.
- 2) The DOT does not classify the mixture as flammable.
- 3) The mixture does not introduce hazards/risks not identified in the 2002 accident analysis.
- 4) The characteristics of the component gases are similar to those considered in the 2002 accident analysis.

The table below contains the trace flammable gases HTS would like to add to the WAP. These gases, along with their maximum trace concentrations as listed below, will be added to Table C-1a(2)(i).

CTFE (R-1113): Chlorotrifluoroethylene Flammable gas Boiling point: - 18F LFL: 8.4% Will request trace component up to 2%	R-152a: Difluoroethane Flammable gas Boiling point: -13 F LFL: 3.9% Will request trace component up to 1%
R-600: Isobutane (MSDS is for R-600a) Flammable gas Boiling point: 10.9 F Flash point: -117 F LFL: 1.8% Will request trace component up to 1%	R-142b: Chlorodifluoroethane Flammable gas Boiling point: -12.9 F LFL: 9.0% Will request trace component up to 2%
R-764: Sulfur Dioxide Toxic, Non-flammable gas Boiling point: 13.9 F LFL: NA – Non-flammable Will request trace component up to 1%	

Material Safety Data Sheets and Safety Data Sheets have been included with this classification determination for your review. Please consider these documents, along with HTS' assessment, and provide a permit modification classification determination for this pending request.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are certain penalties for submitting false information including the possibility of fine and imprisonment for knowing violations.

Thank you and if you have any questions or comments, please call me at the above number.

Sincerely,

Carrie L. Beringer

Environmental, Health, & Safety Manager

Heritage Thermal Services

Lavie LBerne

cc: Natalie Oryshkewych, OEPA-NEDO-DMWM
John Paquelet, OEPA – NEDO – DMWM
Paul Dolensky – OEPA – NEDO – DMWM
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